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EXAMINER

SHERMAN, STEPHEN G

ART UNIT

PAPER NUMBER

2629

NOTIFICATION DATE

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ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary

Application No.

10/553,352

Applicant(s)

TOKIMOTO, TOYOSHI

Examiner

STEPHEN G. SHERMAN

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7, 8, 14 and 21 is/are allowed.
- 6) ☒ Claim(s) 1-5, 9-13, 15-20, 22, 24 and 25 is/are rejected.
- 7) ☒ Claim(s) 6 and 23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This Office action is in response to the amendment filed 29 June 2010. Claims 1-25 are pending.

Response to Arguments

2. Applicant's arguments filed with respect to claims 1-5, 9-13, 15-20, 22, 24 and 25 have been fully considered but they are not persuasive.

On pages 12-14 of the response the Applicant argues the rejection of claims 1-5, 9-13, 15-20, 22, 24 and 25 using the Goode and Kang references.

First, on page 13, the Applicant alleges that the Office Action states "receiving from the user a selection of any function that must be implemented by the server," and that receiving switching-related data from the center device is clearly different from receiving a selection of a function from the user. Therefore, Goode does not teach or suggest that a disturbance in the image is hidden in response to the display device receiving..., switching-related data..., from the center device. The Examiner respectfully disagrees. As stated in the rejection, Figures 1 and 2 and column 4, line 34 to column 5, line 63 of Goode explains that the "visual disturbance" is hidden in response to the receiver receiving from the user a selection of any function that must be implemented by the server, i.e. "switching-related data indicating information with regard to the image switching of the image data by the center device." The Applicant is interpreting

the limitation with regards to their invention, whereas the Examiner is interpreting the claim as is, where since the image-switching is performed by the server, i.e. center device, that upon reception of a user requesting a channel change, i.e. switching related data, which indicates information with regards to the image switching which is performed by the server, i.e. center device, that the disturbance is hidden. Therefore, Goode teaches the **claimed** limitation.

Second, on pages 13 and 14, the Applicant states that it would be improper to add the acknowledgement of Kang into the system of Goode, because Goode teaches an acknowledgement that is not sent from the server and therefore there is no reason why the acknowledgement of Goode would require this modification. The Examiner respectfully disagrees. The Examiner refers the Applicant to MPEP 2141 and 2143, where the Examiner used rationale (B), simple substitution of one known element for another to obtain predictable results, in the rejection. The Examiner points the Applicant to *In re Fout*, 675 F.2d 297, 213 USPQ 532 (CCPA 1982). The claimed invention in *In re Fout*, was directed to a method for decaffeinating coffee or tea. The prior art (Pagliaro) method produced a decaffeinated vegetable material and trapped the caffeine in a fatty material (such as oil). The caffeine was then removed from the fatty material by an aqueous extraction process. Applicant (Fout) substituted an evaporative distillation step for the aqueous extraction step. The prior art (Waterman) suspended coffee in oil and then directly distilled the caffeine through the oil. The court found that "because both Pagliaro and Waterman teach a method for separating caffeine from oil, it would have been prima facie obvious to substitute one method for the other. Express

suggestion to substitute one equivalent for another need not be present to render such substitution obvious." Id. at 301, 213 USPQ at 536.

Third, on page 14, the Applicant argues that even if the acknowledgment (i.e. step 204) were replaced with some different acknowledgment, the combination would still fail to act as a triggering event for hiding a disturbance in the image caused by image switching. The Examiner respectfully disagrees. The claims recite "(i) as an acknowledgment of receiving...or (ii) after the server acknowledges the request for the image switching, and as stated in the rejection, Figure 3 of Kang specifically teaches that switching-related data is transferred from the server after the server acknowledges the request for the image switching. Thus by substituting this teaching into Goode, then the disturbance will be hidden in response to switching related data that is sent after the server acknowledges the request for the image switching. Thus the combination teaches all of the limitations of the claims.

Claim Objections

3. Claim 23 is objected to because of the following informalities:

Claim 23 recites "encoding image data thus switched" which is improper English.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 1-5, 9-13, 15-20, 22, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goode et al. (US 5,966,162) in view of Kang (US 2003/0200551).

Regarding claim 1, Goode et al. disclose a display device that displays an image based on data supplied from a center device (Figure 1 shows the display device as display 110 and box 108, which displays an image based on image data sent from the "center device" which is the comm-network 106, session manager 104 and information server 102.), the display device comprising:

a receiver receiving data from the center device (Figure 1, 120); and
a visual disturbance hiding unit that hides disturbance in the image caused by image switching, in response to the display device receiving, via the receiver, switching-related data indicating information with regard to the image switching of the image data by the center device (Figures 1 and 2 and column 4, line 34 to column 5, line 63, which explains that the "visual disturbance" is hidden in response to the receiver receiving from the user a selection of any function that must be implemented by the server, i.e. "switching-related data indicating information with regard to the image switching of the image data by the center device.").

Goode et al. fails to teach of the switching-related data being transmitted from the center device (i) as an acknowledgement of receiving a request from the display device for performing the image switching, or (ii) after the center device acknowledges the request for the image switching.

Kang discloses a set top unit that receives image data from a server (Figure 3) where switching-related data is transferred from the server (i) as an acknowledgement of receiving a request from the set top box for performing the image switching, or (ii) after the server acknowledges the request for the image switching (Figure 3).

Therefore, it would have been obvious to "one of ordinary skill" in the art at the time the invention was made to use the acknowledgement teachings of Kang to cause the visual disturbance hiding unit of Goode et al. to hide the disturbance of the image instead of the acknowledgement taught by Goode et al. (Figure 2, 204) in order to achieve the predictable result of hiding the visual disturbance.

Regarding claim 2, Goode et al. and Kang disclose the display device as defined in claim 1, wherein, the switching-related data is transmitted when the center device completes the image switching (Figure 3 of Kang shows that the switching related data is transmitted when the server completes the image switching since the switching related data is the switched image data.).

Regarding claim 3, Goode et al. and Kang disclose the display device as defined in claim 1.

Goode et al. also disclose wherein, a period during which the visual disturbance hiding unit hides the disturbance is set in accordance with a delay time from receipt of the image data to display of the image (Figure 2, steps 205-212.).

Regarding claim 4, Goode et al. and Kang disclose the display device as defined in claim 1.

Goode et al. also disclose wherein the image data is encoded data (Column 4, line 23), the display device further comprising:

a decoder that decodes the image data having been encoded (Column 4, lines 5-33),

a period during which the visual disturbance hiding unit hides the disturbance being set in accordance with a period required for decoding the image data by the decoder (Column 6, lines 9-13).

Regarding claim 5, Goode et al. and Kang disclose the display device as defined in claim 1.

Goode et al. also disclose wherein, the visual disturbance hiding unit starts to hide the disturbance when a delay time from receipt of the image data to display of the image elapses from a time point of acquiring the switching-related data (Figure 2, steps 205-212.).

Regarding claim 9, Goode et al. and Kang disclose the display device as defined in claim 1.

Goode et al. also disclose wherein, the visual disturbance hiding unit hides the disturbance of the image by stopping displaying the image (Figure 2 and column 5, lines 33-63).

Regarding claim 10, Goode et al. and Kang disclose the display device as defined in claim 1.

Goode et al. also disclose the display device further comprising:
a transmitter transmitting data to the center device (Figure 1, 120); and
a switching command transmission controller controlling and causing transmitter to send, to the center device, switching demand data that demands switching of the image data (Figure 1, 122. See column 5, lines 13-20).

Regarding claim 11, please refer to the rejection of claims 1 and 10, and furthermore Goode et al. also disclose the center device comprising a transmitter (Figure 1 show information server 102, session manager 104 and the comm-network 106 communicating with each other and the transceiver 120, thus inherently there is a transmitter for transmitting the information.), an image switching unit switching the image data (Figure 1, 102), and a switching related data transmission controller (Figure 1, 114).

Regarding claim 12, this claim is rejected under the same rationale as claim 2.

Regarding claim 13, Goode et al. and Kang disclose the center device as defined in claim 11.

Goode et al. further comprising an encoder configured to encode the image data, the transmitter transmitting, to the display device, the image data encoded by the encoder (As explained above, MPEG-2 is used, and as such, inherently there will be an encoder to encode the data before it is transmitted.).

Regarding claim 15, Goode et al. and Kang disclose the center device as defined in claim 11.

Goode et al. disclose the center device further comprising:

a receiver receiving data from the display device (Figure 1 show information server 102, session manager 104 and the comm-network 106 communicating with each

other and the transceiver 120, thus inherently there is a receiver for receiving the information.);

a switching demand acquiring unit configured to acquire, via the receiver, switching demand data that demands switching of the image data (Figure 1 and column 5, lines 13-20); and

an image switching controller controlling and causing the image switching unit to switch the image data in accordance with the switching demand data obtained by the switching demand acquiring unit (Figure 1 and column 5, lines 13-20).

Regarding claim 16, Goode et al. and Kang disclose the center device as defined in claim 11.

Goode et al. also disclose wherein, the image switching unit is a tuner for selecting image data being currently broadcast (Figure 1, 102).

Regarding claim 17, Goode et al. and Kang disclose the center device as defined in claim 11.

Goode et al. also disclose wherein, the image switching unit is a selector that selects one of sets of image data supplied from outside (Figure 1, 102).

Regarding claim 18, Goode et al. and Kang disclose in mage display system, wherein the center device defined in claim 11 sends the image data to the display device, and the display device displays an image based on the image data (Figure 1).

Regarding claim 19, Goode et al. and Kang disclose the image display system as defined in claim 18, wherein the display device is attachable to the center device (Inherently anything is “attachable” to anything, i.e. by using glue, tape, etc.).

Regarding claim 20, this claim is rejected under the same rationale as claim 1.

Regarding claim 22, this claim is rejected under the same rationale as claim 11.

Regarding claim 24, Goode et al. and Kang disclose a computer-readable recording medium encoded with instructions, where the instructions when executed by a computer cause the computer to perform the method recited in claim 20 (Figure 2 of Goode et al.).

Regarding claim 25, this claim is rejected under the same rationale as claim 24.

Allowable Subject Matter

7. Claims 7, 8, 14 and 21 are allowed, and the subject matter of claim 23 is allowable, but the claim needs to be amended to fix the objection above.

8. Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter:

Claims 7, 14, 21 and 23 have each been similarly amended to now recite that “the visual disturbance hiding unit determining when to stop hiding the disturbance, in accordance with a time point at which the display device receives, separately from the image data having been encoded and before the display device receives the image data having been encoded, via the receiver, a first stamp which is generated when the image data switched by the center device is encoded and which indicates time information for synchronizing encoding performed by the center device with decoding performed by the decoder” in combination with the other recited features of the claims which are not found singularly or in combination within the prior art.

Claim 6 as amended recites “the visual disturbance hiding unit starting to hide the disturbance when a certain time elapses from a time point of acquiring the switching-related data, the certain time being shorter than a delay time from receipt of the image data to display of the image by a time required for decoding the image data by the decoder” in combination with the other recited features of the claim which are not found singularly or in combination within the prior art.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **STEPHEN G. SHERMAN** whose telephone number is (571)272-2941. The examiner can normally be reached on M-F, 7:30 a.m. - 4:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Stephen G Sherman/
Examiner, Art Unit 2629

21 July 2010